

## Method for determining the time of reclosing a circuit breaker and device for carrying out this method

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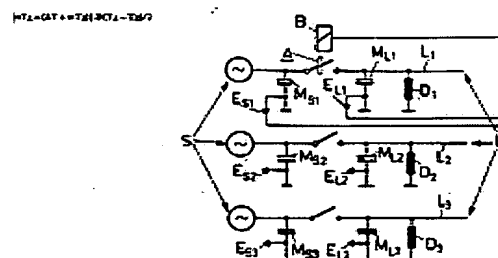
Also published in:

EP015  
 US472  
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Abstract not available for DE3560974D

Abstract of correspondent: **US4724391**

A method for reclosing a temporarily opened circuit breaker in a manner which assures that generation of unwanted overvoltage stresses is avoided during the reclosure process. An oscillating line voltage typically develops in a shunt-compensated line after a circuit breaker connecting the line to a voltage source is opened. When the circuit breaker is reclosed the source voltage and the oscillating voltages must be properly phased to avoid the overstressing problem. In operation, the polarities of the feed voltage and the oscillating line voltage are detected and the instant when the circuit breaker may be reclosed is calculated. The periods  $T_L$  and  $T_S$  of the line voltage and the feed voltage are measured. Also measured is the time  $\Delta T$  which elapses from a zero crossing of the line voltage waveform to a subsequent zero crossing of the feed voltage waveform having the same phase angle as that of the line voltage zero crossing. The circuit breaker is reclosed upon satisfying the relationship:  $|nT_L - (\Delta T + mT_S)| \leq (T_L - T_S)/2$  where  $m, n$  are natural numbers which are sequentially entered in the above equation.



6 family members for:

**EP0152739**

Derived from 5 applications.

- 1 METHOD FOR DETERMINING THE TIME OF RECLOSING A CIRCUIT BREAKER AND DEVICE FOR CARRYING OUT THIS METHOD**  
Publication info: **CA1233228 A1** - 1988-02-23
- 2 Method for determining the time of reclosing a circuit breaker and device for carrying out this method**  
Publication info: **DE3560974D .D1** - 1987-12-17
- 3 Method for the determination of the instant of the reclosure of a power circuit breaker, and apparatus to carrying out this method.**  
Publication info: **EP0152739 A1** - 1985-08-28  
**EP0152739 B1** - 1987-11-11
- 4 METHOD OF OBTAINING TIMING OF RECLOSING BREAKER AND DEVICE THEREFOR**  
Publication info: **JP60246522 A** - 1985-12-06
- 5 Method for determining the time of reclosing a circuit breaker and device for carrying out this method**  
Publication info: **US4724391 A** - 1988-02-09